



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------|------------------------|
| 10/686,998 | 10/16/2003 | Patrick J. Sweeney | 029815-0103 | 7428 |
| 26371 | 7590 | 12/31/2007 | | |
| FOLEY & LARDNER LLP 777 EAST WISCONSIN AVENUE MILWAUKEE, WI 53202-5306 | | | EXAMINER MILLER, CHERYL L | |
| | | | ART UNIT 3738 | PAPER NUMBER |
| | | | MAIL DATE 12/31/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/686,998

Applicant(s)

SWEENEY, PATRICK J. *mn*

Examiner

Cheryl Miller

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) 10,12,18,22,28,37,43,66 and 70 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9,11,13,15,17,21,23,25,27,32,34,36,38,39,41,61,68 and 69 is/are rejected.
- 7) ☒ Claim(s) 29,30 and 63-65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1,3,5-13,15,17,18,21-23,25,27-30,32,34,36-39,41,43,61,63-66 and 68-70.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 30, 2007 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1, 3, 5-9, 11, 13, 15, 17, 21, 23, 25, 27, 29, 30, 32, 34, 36, 38, 39, 41, 61-65, 68, and 69 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5-8, 11, 15, 17, 32, 34, 36, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Hedman et al. (US 4,759,769). Hedman discloses a system (fig.1, 2) comprising a vertebral prosthesis having a support shaft (74) and a prosthesis endplate (26) and a

spinal disc comprising a disc endplate (28) and disc core (72), and a pedicle screw retainer (46) coupled to the support (26) the retainer having a top, bottom, sidewall and aperture configured to receive a pedicle screw (94, 96, screws adapted for placement into the pedicles). Hedman discloses an adjustable height support shaft (shaft 74 is a spring and compresses to different heights). It is noted with respect to claim 32, first and second discs are not positively claimed since the phrase implanted adjacent either a first or second disc is intended use language and the claim does not define the discs to be part of the spinal implant system, only capable of use with disc implants, thus disc implants need not be present in the prior art. Hedman's core (72) does not rotate relative the endplate (26).

Claims 1, 5, 6, 7, 11, 13, 15, 21, 23, 25, 32, 34, 38, 39, 41, 61, 68, and 69 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Berry et al. (US 5,895,428, cited in IDS). Berry discloses a system (figs.8-11) comprising a vertebral prosthesis having a support shaft (105) and a prosthesis endplate (21, 121) and a spinal disc comprising a disc endplate (35) and disc core (13), and a pedicle screw retainer (considered to be outer circumferential layer of shaft 105) coupled to the support (outer layer of 105 is connected to support 105) the retainer having a top, bottom, sidewall and aperture configured to receive a pedicle screw (Berry shows in fig.8 , a screw 108 that appears to go through the pedicle, and that is capable of going through the pedicle and into the support shaft 105; inherently there is an aperture in the outer surface layer of support 105, since the screw is disclosed to go *into* the support 105; col.7, lines 1-5; the outer layer of support is considered the "retainer" since it performs the function of retaining a screw and has an aperture, it has a top, bottom and side wall as it is considered an outer layer with a thickness of the aperture). If not

inherent that the outer layer of support shaft (105) may be considered the “retainer”, it would have been obvious to have a separate structure that serves as a “retainer” since making something separate that was once integral is a mere matter of obvious engineering choice, the same function is still being served. *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961).

Berry further discloses the prosthesis endplate (21, 121) to be threadably connected (111, 115, 123, 119) to the support (105). Berry discloses a first prosthesis endplate and disc prosthesis (seen as located above 105 in fig.11) and a second prosthesis endplate and disc prosthesis (seen as located below 105 in fig.11). Berry discloses disc prostheses with different configurations (discloses different sizes to chose from to match the anatomy of the patient for the desired location; figs.12-19; col.4, lines 21-24; col.3, lines 7-12; col.8, lines 8-18; col.9, lines 23-34). Berry discloses adjustment of the vertebral prosthesis height (col.7, lines 54-61).

Claims 1, 5, 7-9, 11, 13, 15, 17, 21, 23, 25, 27, 32, 34, 36, 38, 61, 68, and 69 are rejected under 35 U.S.C. 102(e) as being anticipated by Malek (US 2005/0071007 A1, cited in IDS). See figures 25-28. Malek discloses a support shaft (228), first and second prosthesis endplates (286, 288), first and second disc cores (302 and 304) and first and second disc endplates (270, 272). The support shaft is adjustable in height, by screw thread (240 and 242 relative 232). Malek discloses a pedicle screw retainer (tab 268) for receiving a screw (270; fig.28) *capable of* extending through a pedicle.

Allowable Subject Matter

Claims 29, 30, and 63-65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Miller whose telephone number is (571) 272-4755. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4755. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cheryl Miller/


CORRINE McDERMOTT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700